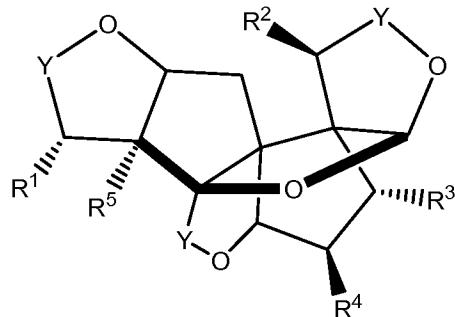


**AMENDMENTS TO THE CLAIMS**

1. (Original): A compound having the formula:



(I)

or a pharmaceutically acceptable salt thereof,

wherein:

each occurrence of Y is independently  $-\text{CH}_2-$  or  $-\text{C}(\text{O})-$ ;

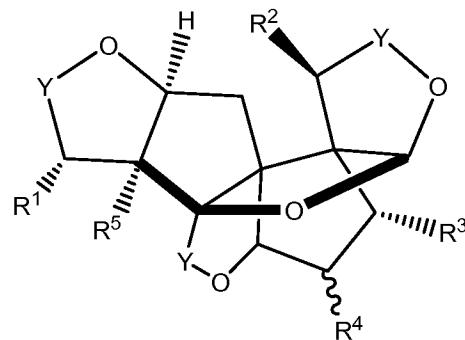
$\text{R}^1$  and  $\text{R}^3$  are each independently  $-\text{H}$  or  $-\text{C}_1\text{-C}_6$  alkyl;

$\text{R}^2$  is  $-\text{H}$ ,  $-\text{OH}$ ,  $-\text{O}-\text{C}_1\text{-C}_5$  alkyl,  $-\text{O}-\text{C}_2\text{-C}_5$  alkenyl,  $-\text{O}-\text{C}_2\text{-C}_5$  alkynyl,  $-\text{O}-\text{C}(\text{O})-\text{C}_1\text{-C}_5$  alkyl,  $-\text{O}-\text{C}(\text{O})\text{-aryl}$ ,  $-\text{O}-\text{CO-NH-C}_1\text{-C}_5$  alkyl,  $-\text{O}-\text{SO}_2\text{-C}_1\text{-C}_5$  alkyl, or  $-\text{O}-\text{SO}_2\text{-aryl}$ ;

$\text{R}^4$  is  $-\text{C}_1\text{-C}_5$  alkyl,  $-\text{NH}_2$ ,  $-\text{halo}$ ,  $-\text{C}_2\text{-C}_5$  alkenyl,  $-\text{C}_2\text{-C}_5$  alkynyl,  $-\text{O}-\text{C}_1\text{-C}_5$  alkyl,  $-\text{O}-\text{C}_2\text{-C}_5$  alkenyl,  $-\text{O}-\text{C}_2\text{-C}_5$  alkynyl,  $-\text{O}-\text{C}(\text{O})-\text{C}_1\text{-C}_5$  alkyl,  $-\text{O}-\text{C}(\text{O})\text{-aryl}$ ,  $-\text{O}-\text{CO-NH-C}_1\text{-C}_5$  alkyl,  $-\text{O}-\text{SO}_2\text{-C}_1\text{-C}_5$  alkyl, or  $-\text{O}-\text{SO}_2\text{-aryl}$ ; and

$\text{R}^5$  is  $-\text{H}$  or  $-\text{OH}$ .

2. (Original): A composition consisting essentially of two or more structurally distinct compounds, each having the formula:



(II)

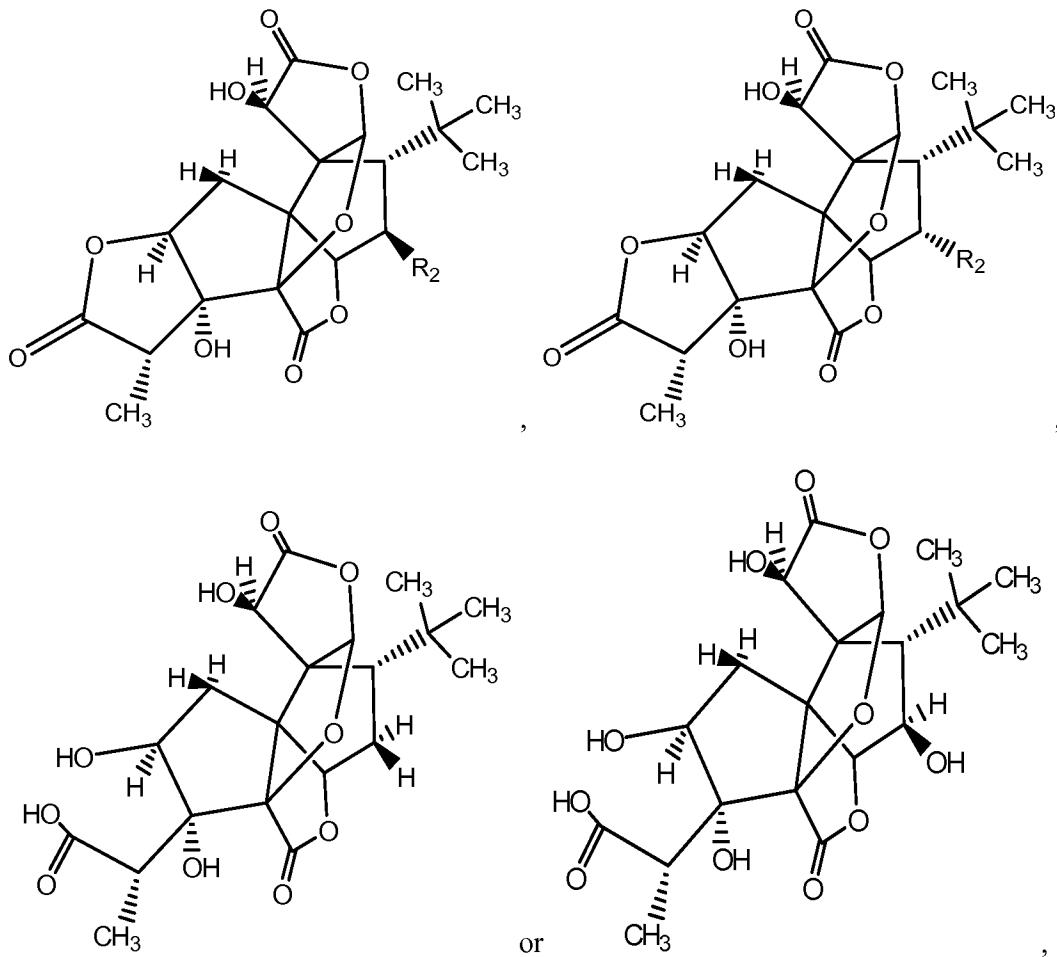
wherein:

each occurrence of Y is independently  $-\text{CH}_2-$  or  $-\text{C}(\text{O})-$ ; $\text{R}^1$  and  $\text{R}^3$  and are each independently  $-\text{H}$  or  $-\text{C}_1\text{-C}_6$  alkyl; $\text{R}^1$  and  $\text{R}^3$  are each independently  $-\text{H}$  or  $-\text{C}_1\text{-C}_6$  alkyl; $\text{R}^2$  is  $-\text{H}$ ,  $-\text{OH}$ ,  $-\text{O-C}_1\text{-C}_5$  alkyl,  $-\text{O-C}_2\text{-C}_5$  alkenyl,  $-\text{O-C}_2\text{-C}_5$  alkynyl,  $-\text{O-C}(\text{O})\text{-C}_1\text{-C}_5$ alkyl,  $-\text{O-C}(\text{O})\text{-aryl}$ ,  $-\text{O-CO-NH-C}_1\text{-C}_5$  alkyl,  $-\text{O-SO}_2\text{-C}_1\text{-C}_5$  alkyl, or  $-\text{O-SO}_2\text{-aryl}$ ; $\text{R}^4$  is  $-\text{C}_1\text{-C}_5$  alkyl,  $-\text{NH}_2$ ,  $-\text{halo}$ ,  $-\text{C}_2\text{-C}_5$  alkenyl,  $-\text{C}_2\text{-C}_5$  alkynyl,  $-\text{O-C}_1\text{-C}_5$  alkyl,  $-\text{O-C}_2\text{-C}_5$  alkenyl,  $-\text{O-C}_2\text{-C}_5$  alkynyl,  $-\text{O-C}(\text{O})\text{-C}_1\text{-C}_5$  alkyl,  $-\text{O-C}(\text{O})\text{-aryl}$ ,  $-\text{O-CO-NH-C}_1\text{-C}_5$  alkyl,  $-\text{O-SO}_2\text{-C}_1\text{-C}_5$  alkyl, or  $-\text{O-SO}_2\text{-aryl}$ ; and $\text{R}^5$  is  $-\text{H}$  or  $-\text{OH}$ .

3. (Previously Presented): The composition of claim 2, wherein for at least one compound of formula (II), each occurrence of Y is  $-\text{CH}_2-$ .

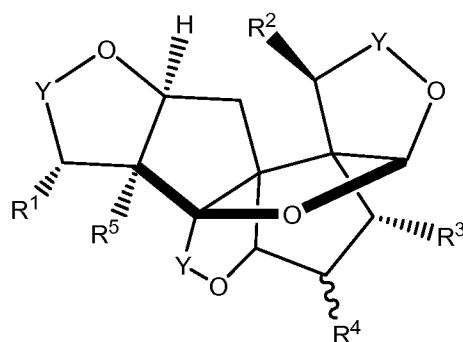
4. (Previously Presented): The composition of claim 2, wherein for at least one compound of formula (II), each occurrence of Y is  $-C(O)-$ .
5. (Previously Presented): The composition of claim 2, wherein for at least one compound of formula (II),  $R^1$  is  $-C_1-C_6$  alkyl.
6. (Original): The composition of claim 5, wherein  $R^1$  is methyl.
7. (Previously Presented): The composition of claim 2, wherein for at least one compound of formula (II),  $R^3$  is  $-C_1-C_6$  alkyl.
8. (Original): The composition of claim 7, wherein  $R^3$  is *tert*-butyl.
9. (Previously Presented): The composition of claim 2, wherein for at least one compound of formula (II),  $R^4$  is  $-OH$ .
10. (Previously Presented): The composition of claim 2, wherein for at least one compound of formula (II),  $R^5$  is  $-OH$ .
11. (Previously Presented): The composition of claim 2, wherein for at least one compound of formula (II),  $R^2$  is  $-OH$ .

12. (Previously Presented): A composition consisting essentially of a first compound having the formula:



wherein R<sub>2</sub> is -H, -C<sub>1</sub>-C<sub>5</sub> alkyl, -OH, -NH<sub>2</sub>, -halo, -C<sub>2</sub>-C<sub>5</sub> alkenyl, -C<sub>2</sub>-C<sub>5</sub> alkynyl, -O-C<sub>1</sub>-C<sub>5</sub> alkyl, -O-C<sub>2</sub>-C<sub>5</sub> alkenyl, -O-C<sub>2</sub>-C<sub>5</sub> alkynyl, -O-C(O)-C<sub>1</sub>-C<sub>5</sub> alkyl, -O-C(O)-aryl, -O-CO-NH-C<sub>1</sub>-C<sub>5</sub> alkyl, -O-SO<sub>2</sub>-C<sub>1</sub>-C<sub>5</sub> alkyl, or -O-SO<sub>2</sub>-aryl;

and one or more structurally distinct compounds, each having the formula:



(II)

wherein each occurrence of Y is independently  $-\text{CH}_2-$  or  $-\text{C}(\text{O})-$ ;

$\text{R}^1$  and  $\text{R}^3$  and are each independently  $-\text{H}$  or  $-\text{C}_1\text{-C}_6$  alkyl;

$\text{R}^1$  and  $\text{R}^3$  are each independently  $-\text{H}$  or  $-\text{C}_1\text{-C}_6$  alkyl;

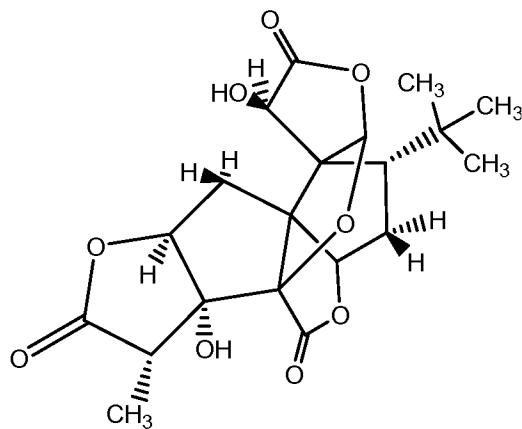
$\text{R}^2$  is  $-\text{H}$ ,  $-\text{OH}$ ,  $-\text{O-C}_1\text{-C}_5$  alkyl,  $-\text{O-C}_2\text{-C}_5$  alkenyl,  $-\text{O-C}_2\text{-C}_5$  alkynyl,  $-\text{O-C}(\text{O})\text{-C}_1\text{-C}_5$  alkyl,  $-\text{O-C}(\text{O})\text{-aryl}$ ,  $-\text{O-CO-NH-C}_1\text{-C}_5$  alkyl,  $-\text{O-SO}_2\text{-C}_1\text{-C}_5$  alkyl, or  $-\text{O-SO}_2\text{-aryl}$ ;

$\text{R}^4$  is  $-\text{C}_1\text{-C}_5$  alkyl,  $-\text{NH}_2$ ,  $-\text{halo}$ ,  $-\text{C}_2\text{-C}_5$  alkenyl,  $-\text{C}_2\text{-C}_5$  alkynyl,  $-\text{O-C}_1\text{-C}_5$  alkyl,  $-\text{O-C}_2\text{-C}_5$  alkenyl,  $-\text{O-C}_2\text{-C}_5$  alkynyl,  $-\text{O-C}(\text{O})\text{-C}_1\text{-C}_5$  alkyl,  $-\text{O-C}(\text{O})\text{-aryl}$ ,  $-\text{O-CO-NH-C}_1\text{-C}_5$  alkyl,  $-\text{O-SO}_2\text{-C}_1\text{-C}_5$  alkyl, or  $-\text{O-SO}_2\text{-aryl}$ ; and

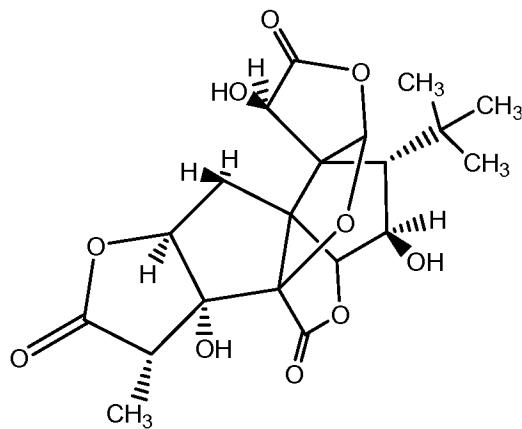
$\text{R}^5$  is  $-\text{H}$  or  $-\text{OH}$ .

13. (Cancelled).

14. (Previously Presented): The composition of claim 12, wherein the first compound is a compound having the formula:



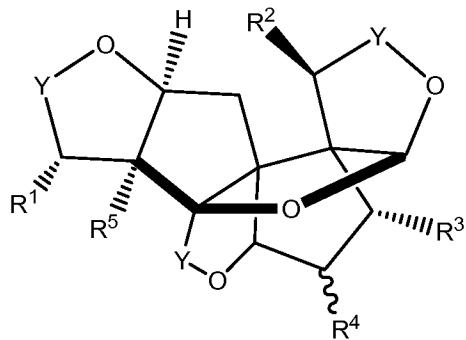
15. (Previously Presented): The composition of claim 12, wherein the first compound is a compound having the formula:



16-17. (Canceled)

18. (Previously Presented): A composition consisting essentially of Ginkgolide A and Ginkgolide J.

19. (Previously Presented): A composition consisting essentially of (i) an antioxidant, a pharmaceutical carrier, or a combination thereof and (ii) two or more structurally distinct compounds, each having the formula:



(II)

wherein:

each occurrence of Y is independently  $-\text{CH}_2-$  or  $-\text{C}(\text{O})-$ ;

$\text{R}^1$  and  $\text{R}^3$  and are each independently  $-\text{H}$  or  $-\text{C}_1\text{-C}_6$  alkyl;

$\text{R}^1$  and  $\text{R}^3$  are each independently  $-\text{H}$  or  $-\text{C}_1\text{-C}_6$  alkyl;

$\text{R}^2$  is  $-\text{H}$ ,  $-\text{OH}$ ,  $-\text{O-C}_1\text{-C}_5$  alkyl,  $-\text{O-C}_2\text{-C}_5$  alkenyl,  $-\text{O-C}_2\text{-C}_5$  alkynyl,  $-\text{O-C}(\text{O})\text{-C}_1\text{-C}_5$  alkyl,  $-\text{O-C}(\text{O})\text{-aryl}$ ,  $-\text{O-CO-NH-C}_1\text{-C}_5$  alkyl,  $-\text{O-SO}_2\text{-C}_1\text{-C}_5$  alkyl, or  $-\text{O-SO}_2\text{-aryl}$ ;

$\text{R}^4$  is  $-\text{C}_1\text{-C}_5$  alkyl,  $-\text{NH}_2$ ,  $-\text{halo}$ ,  $-\text{C}_2\text{-C}_5$  alkenyl,  $-\text{C}_2\text{-C}_5$  alkynyl,  $-\text{O-C}_1\text{-C}_5$  alkyl,  $-\text{O-C}_2\text{-C}_5$  alkenyl,  $-\text{O-C}_2\text{-C}_5$  alkynyl,  $-\text{O-C}(\text{O})\text{-C}_1\text{-C}_5$  alkyl,  $-\text{O-C}(\text{O})\text{-aryl}$ ,  $-\text{O-CO-NH-C}_1\text{-C}_5$  alkyl,  $-\text{O-SO}_2\text{-C}_1\text{-C}_5$  alkyl, or  $-\text{O-SO}_2\text{-aryl}$ ; and

$\text{R}^5$  is  $-\text{H}$  or  $-\text{OH}$ .

20. (Original): The composition of claim 19, wherein the antioxidant is vitamin C, vitamin E, N-acetyl-L-cysteine, resveratrol, coenzyme Q, alpha-lipoic acid, lycopene, or any combination thereof.
21. (Previously Presented): The composition of claim 19, wherein the antioxidant is a biflavone.
22. (Original): The composition of claim 21, wherein the biflavone is amentoflavone, ailobetin, ginkgetin, isoginkgetin, sciadopirysin, or any combination thereof.
23. (Previously Presented): The composition of claim 19, wherein the antioxidant is a flavonoid.
24. (Original): The composition of claim 23, wherein the flavonoid is a flavonol glycoside.
25. (Original): The composition of claim 24, wherein the flavonol glycoside is quercetin, kaempferol, isorhamnetin, or any combination thereof.
- 26-28. (Canceled).

29. (Previously Presented): The composition of claim 18, wherein the composition is obtained using a process comprising:

- (i) extracting Ginkgo Biloba plant material with ethyl acetate and filtering the resultant solution to provide a first filtered residue and a first filtrate;
- (ii) diluting the first filtered residue with diethyl ether and filtering the resultant solution to provide a second filtered residue and a second filtrate;
- (iii) diluting the second filtered residue with methanol and filtering the resultant solution to provide a third residue and a third filtrate;
- (iv) concentrating the third filtrate and subjecting the resultant concentrate to chromatography under conditions sufficient to provide a first fraction which comprises a mixture of Ginkgolide A and Ginkgolide B, and a second fraction which comprises a mixture of Ginkgolide C and Ginkgolide J;
- (v) combining the first and second fractions and concentrating the combined first and second fractions to provide a concentrate which comprises Ginkgolide A, Ginkgolide B, Ginkgolide C and Ginkgolide J;
- (vi) diluting the concentrate obtained in step (v) with an organic solvent and contacting the components of the resultant solution with benzyl bromide in the presence of a non-nucleophilic base under conditions sufficient to provide a product mixture which comprises unreacted Ginkgolide A, unreacted Ginkgolide J, benzylated Ginkgolide B and benzylated Ginkgolide C;
- (vii) subjecting the product mixture obtained in step (vii) to chromatography under conditions sufficient to provide a composition comprising Ginkgolide A and Ginkgolide J; and

(viii) purifying the composition obtained in step (vii) to obtain a purified composition consisting essentially of Ginkgolide A and Ginkgolide J.

30-57. (Canceled).